

Enrollment No./Seat No.:

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Bachelor of Engineering - SEMESTER - VII EXAMINATION - WINTER 2025**

**Subject Code: 3171616**

**Date: 13-11-2025**

**Subject Name: Internetwork Security and Web Analytics**

**Time: 10:30 AM TO 01:00 PM**

**Total Marks: 70**

**Instructions**

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**
- 4. Simple and non-programmable scientific calculators are allowed.**

	<b>Marks</b>
<b>Q.1 (a)</b> Define a host-based security system and explain it in detail	<b>03</b>
<b>(b)</b> How can networks be secured against common online threats? Describe key defense techniques	<b>04</b>
<b>(c)</b> Explain the importance of web analytics	<b>07</b>
<b>Q.2 (a)</b> What are passive attacks? Explain them briefly	<b>03</b>
<b>(b)</b> Explain site search analysis.	<b>04</b>
<b>(c)</b> What do you mean by a cyber-attack? List and briefly describe its different types	<b>07</b>
<b>OR</b>	
<b>(c)</b> Explain OSI reference model in detail	<b>07</b>
<b>Q.3 (a)</b> How do you measure effectiveness of PPC?	<b>03</b>
<b>(b)</b> What is the difference between internal search and external search in website?	<b>04</b>
<b>(c)</b> How do you measure blog performance?	<b>07</b>
<b>OR</b>	
<b>(a)</b> Differentiate SEO and PPC	<b>03</b>
<b>(b)</b> Define trust and security in the context of an e-commerce website	<b>04</b>
<b>(c)</b> What is Search Engine Optimization (SEO), and how is it implemented?	<b>07</b>
<b>Q.4 (a)</b> What is multichannel marketing? Explain briefly.	<b>03</b>
<b>(b)</b> What is A/B Testing?	<b>04</b>
<b>(c)</b> "What are the three layers of the 'So What' test? Explain each."	<b>07</b>
<b>OR</b>	
<b>(a)</b> What techniques improve search traffic? Explain.	<b>03</b>
<b>(b)</b> Define email marketing and discuss its key fundamentals	<b>04</b>

- (c) "What are On-page and Off-page SEO? Explain their roles in website optimization." 07
- Q.5** (a) What are the responsibilities of webmaster? 03
- (b) What are the different e-commerce models? List and explain each. 04
- (c) Describe the steps involved in the website testing process. 07

**OR**

- (a) Define: SEO-KPI 03
- (b) What are navigation reports in Google Analytics? Explain how they work 04
- (c) Explain Black-Hat SEO Technique 07

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